

**REMARKS**

Applicants request reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks.

Claims 1-16 are pending in the present application. Claims 1, 5, 9, and 13 are the independent claims.

Claims 1-16 stand rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,043,911 (Yang). Claims 1-16 also stand rejected under 35 U.S.C. § 103 as being unpatentable over Yang in view of U.S. Patent No. 6,567,355 (Izumi et al.). All rejections are respectfully traversed.

Independent claims 1 and 5 recite, inter alia, moving the holographic optical element.

Independent claim 9 recites, inter alia, a movable holographic optical element.

Independent claim 13 recites, inter alia, a [movable] holographic optical element.

However, Applicants respectfully submit that Yang does not teach at least the aforementioned features. Also, Applicants respectfully submit that the asserted combination of citations is improper.

**Traversal of the rejection of claims 1-16 under 35 U.S.C. § 102**

Yang describes an optical pickup arrangement including a hologram optical element (HOE) 38. The Office Action contends that this HOE is movable. (Office Action, page 2). This contention is respectfully traversed

Applicants note that the sole support for the Office's contention is inherency. (Office Action, page 2 "[the HOE] inherently has to be movable/adjustable before being placed...."). Applicants submit that this teaching cannot be inherent, at least for the reasons set forth below.

The Manual of Patent Examining Procedure (MPEP) warns that "the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (MPEP, § 2112, IV, (attached as Exhibit A) citing In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversing a rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art). For this reason, the MPEP instructs that "in relying

upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." (MPEP, § 2112, IV, citing Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original)). Thus, a teaching is inherent only when it necessarily flows from the teachings of applied art.

Applicants submit that the express teachings of Yang not just weigh against the Office's contention but preclude the Office's contention, because the Yang HOE is fixed.

Firstly, FIGS. 2-6 of Yang, cited by the Office in support of its contention that the HOE is "inherently" movable, all show that the HOE 38 fixed to a cap 36. Secondly, Yang expressly teaches that the HOE is "positioned at the upper surface of the cap 36." (Yang, Col. 3, lines 28-30). Thirdly, Yang is silent as to the condition of the HOE "before being placed," as asserted in the Office Action as evidence of movability.

In view of the above express teachings of Yang that the HOE is fixed, Applicants respectfully submit that it is not reasonable to conclude that a teaching of a movable HOE necessarily flows from the teachings of Yang. Indeed, Applicants respectfully submit that these express teachings of Yang preclude such a conclusion. Thus, Yang does not teach at least the aforementioned features of independent claims 1, 5, 9, and 13.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claims 1, 5, 9, and 13 under 35 U.S.C. § 103 are respectfully requested.

#### Traversal of the rejection of claims 1-16 under 35 U.S.C. § 103

As explained above, the Yang HOE is fixed. Nonetheless, the Office Action contends that Izumi et al. provides the necessary teaching of a moveable HOE and that combining Yang and Izumi et al. is proper. The latter contention is respectfully traversed.

The Office Action, in the Response to Arguments portion, is replete with explanations of desirability of the combination and that the asserted combination is within the capability of one of ordinary skill in the art. (Office Action, pages 6-8). However, Applicants have not argued about that the desirability of the asserted combination. Rather, Applicants submit that the proposed modification violates a fundamental principle of the concept of prima facie obviousness and is thus improper.

Applicants continue to argue that the proposed modification of Yang in view of the teachings of Izumi et al. is improper because the proposed modification alters a principle of operation of Yang. On this critical point, the Office Action devotes single conclusory statement that “the proposed combination of the prior art would NOT change the principle of operation....” (Office Action, page 8). Applicants note that this statement is unsupported by any evidence or argument, save reference to the desirability of the combination and the level of skill necessary to make the combination (Office Action, page 7, “the examiner cannot concur with Applicants because, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so.” However, this argument wholly ignores that fact that if a proposed modification changes the principle of operation of a cited art, there is no motivation to make the asserted citation, regardless of the desirability to make the combination or whether the combination is within the skill of those in the art.

Section 2142.01, VI, of the MPEP (copy attached as Exhibit B) warns that:

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious.

Citing In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Stated another way, if a proposed modification changes the principle of operation of a cited art, there is no motivation to make the asserted citation, regardless of the desirability to make the combination or whether the combination is within the capability of one of ordinary skill in the art. Such is the case here.

As explained above and previously, Yang teaches using an HOE fixed to a cap to locate the HOE in a particular orientation with the light sources and to be upstream of a beam splitter. In contrast, Izumi et al. teaches using a movable diffraction grating located downstream of a half mirror. Modifying the HOE of Yang in view of Izumi et al. as asserted in the Office Action would clearly alter the principle of operation of Yang by altering how Yang uses the HOE.

Altering the principle of operation of Yang violates the fundamental tenant of the concept of prima facie obviousness set forth in Section 2143.01 VI of the MPEP. Thus, the asserted combination is improper.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claims 1, 5, 9, and 13 under 35 U.S.C. § 103 are respectfully requested.

In view of the foregoing, Applicant respectfully submits that the independent claims patentably define the present invention over the citations of record. Further, the dependent claims should also be allowable for the same reasons as their respective base claims and further due to the additional features that they recite. Separate and individual consideration of the dependent claims is respectfully requested.

Applicant believes that the present Amendment is responsive to each of the points raised by the Examiner in the Official Action. However, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to such matters.

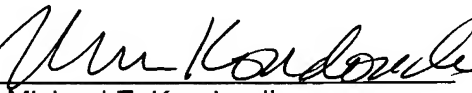
There being no further outstanding objections or rejections, it is submitted that the present application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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## **EXHIBIT A**

fore, a 35 U.S.C. 102/103 rejection is appropriate for these types of claims as well as for composition claims.

#### IV. EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ ” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) (The claims were drawn to a disposable diaper having three fastening elements. The reference disclosed two fastening elements that could perform the same function as the three fastening elements in the claims. The court construed the claims to require three separate elements and held that the reference did not disclose a separate third fastening element, either expressly or inherently.). >Also, “[a]n invitation to investigate is not an inherent disclosure” where a prior art reference “discloses no more than a broad genus of potential applications of its discoveries.” *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1367, 71 USPQ2d 1081, 1091 (Fed. Cir. 2004) (explaining that “[a] prior art reference that discloses a genus still does not inherently disclose all species within that broad category” but must be examined to see if a disclosure of the claimed species has been made or whether the prior art reference merely invites further experimentation to find the species.<

“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that

the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (Applicant’s invention was directed to a biaxially oriented, flexible dilation catheter balloon (a tube which expands upon inflation) used, for example, in clearing the blood vessels of heart patients). The examiner applied a U.S. patent to Schjeldahl which disclosed injection molding a tubular preform and then injecting air into the preform to expand it against a mold (blow molding). The reference did not directly state that the end product balloon was biaxially oriented. It did disclose that the balloon was “formed from a thin flexible inelastic, high tensile strength, biaxially oriented synthetic plastic material.” *Id.* at 1462 (emphasis in original). The examiner argued that Schjeldahl’s balloon was inherently biaxially oriented. The Board reversed on the basis that the examiner did not provide objective evidence or cogent technical reasoning to support the conclusion of inherency.).

In *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429 (Fed. Cir. 1997), the court affirmed a finding that a prior patent to a conical spout used primarily to dispense oil from an oil can inherently performed the functions recited in applicant’s claim to a conical container top for dispensing popped popcorn. The examiner had asserted inherency based on the structural similarity between the patented spout and applicant’s disclosed top, i.e., both structures had the same general shape. The court stated:

[N]othing in Schreiber’s [applicant’s] claim suggests that Schreiber’s container is of a ‘different shape’ than Harz’s [patent]. In fact, [ ] an embodiment according to Harz (Fig. 5) and the embodiment depicted in Fig. 1 of Schreiber’s application have the same general shape. For that reason, the examiner was justified in concluding that the opening of a conically shaped top as disclosed by Harz is inherently of a size sufficient to ‘allow [ ] several kernels of popped popcorn to pass through at the same time’ and that the taper of Harz’s conically shaped top is inherently of such a shape ‘as to by itself jam up the popped popcorn before the end of the cone and permit the dispensing of only a few kernels at a shake of a package when the top is mounted to the container.’ The examiner therefore correctly found that Harz established a prima facie case of anticipation.

*In re Schreiber*, 128 F.3d at 1478, 44 USPQ2d at 1432.

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## **EXHIBIT B**

“Although statements limiting the function or capability of a prior art device require fair consideration, simplicity of the prior art is rarely a characteristic that weighs against obviousness of a more complicated device with added function.” *In re Dance*, 160 F.3d 1339, 1344, 48 USPQ2d 1635, 1638 (Fed. Cir. 1998) (Court held that claimed catheter for removing obstruction in blood vessels would have been obvious in view of a first reference which taught all of the claimed elements except for a “means for recovering fluid and debris” in combination with a second reference describing a catheter including that means. The court agreed that the first reference, which stressed simplicity of structure and taught emulsification of the debris, did not teach away from the addition of a channel for the recovery of the debris.).

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#### VI. < THE PROPOSED MODIFICATION CANNOT CHANGE THE PRINCIPLE OF OPERATION OF A REFERENCE

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) (Claims were directed to an oil seal comprising a bore engaging portion with outwardly biased resilient spring fingers inserted in a resilient sealing member. The primary reference relied upon in a rejection based on a combination of references disclosed an oil seal wherein the bore engaging portion was reinforced by a cylindrical sheet metal casing. Patentee taught the device required rigidity for operation, whereas the claimed invention required resiliency. The court reversed the rejection holding the “suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.” 270 F.2d at 813, 123 USPQ at 352.).

### 2143.02 Reasonable Expectation of Success Is Required

#### OBVIOUSNESS REQUIRES ONLY A REASONABLE EXPECTATION OF SUCCESS

The prior art can be modified or combined to reject claims as *prima facie* obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) (Claims directed to a method of treating depression with amitriptyline (or nontoxic salts thereof) were rejected as *prima facie* obvious over prior art disclosures that amitriptyline is a compound known to possess psychotropic properties and that imipramine is a structurally similar psychotropic compound known to possess antidepressive properties, in view of prior art suggesting the aforementioned compounds would be expected to have similar activity because the structural difference between the compounds involves a known bioisosteric replacement and because a research paper comparing the pharmacological properties of these two compounds suggested clinical testing of amitriptyline as an antidepressant. The court sustained the rejection, finding that the teachings of the prior art provide a sufficient basis for a reasonable expectation of success.); *Ex parte Blanc*, 13 USPQ2d 1383 (Bd. Pat. App. & Inter. 1989) (Claims were directed to a process of sterilizing a polyolefinic composition with high-energy radiation in the presence of a phenolic polyester antioxidant to inhibit discoloration or degradation of the polyolefin. Appellant argued that it is unpredictable whether a particular antioxidant will solve the problem of discoloration or degradation. However, the Board found that because the prior art taught that appellant’s preferred antioxidant is very efficient and provides better results compared with other prior art antioxidants, there would have been a reasonable expectation of success.).

#### AT LEAST SOME DEGREE OF PREDICTABILITY IS REQUIRED; APPLICANTS MAY PRESENT EVIDENCE SHOWING THERE WAS NO REASONABLE EXPECTATION OF SUCCESS

Obviousness does not require absolute predictability, however, at least some degree of predictability is